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ALLEN
ENGINEERED VENTILATION

Allen

Catalog No. 591

ALLEN PLANNED VENTILATING SYSTEMS

In addition to the equipment illustrated in this catalog, the Allen Ventilator Division is prepared to investigate plant conditions and to plan efficient, economical ventilating systems to meet specific requirements. The broad coverage of the Allen line permits the selection of the most suitable type of equipment and the effective utilization of natural forces as well as the application of power.

Heat Removal, the most common problem, may usually be solved by natural gravity or stack effect. Glass plants, forge shops and foundries are typical examples of this type of application.

Moisture Removal is a more critical problem which involves measurement of moisture content of air in the affected areas, calculation of air volume required

ALLEN TYPE "A" TURBINE VENTILATOR

Allen Type "A" Turbine Ventilators are designed to take fullest advantage of natural air movement. Force of wind accelerates discharge of air through throat diameter. Free rotation of blades reduces effective obstructing area thus increasing efficiency.

Type "A" is of sturdy construction with center support of turbine rotor built up of die formed blades spot welded in accurate jig to insure absolute balance, turns on high quality ball bearings. Constructed of prime zinc coated iron, spot welded for permanence. Completed unit is finished with weathered aluminum paint.

CAPACITIES—Type "A" and Type "C"

Throat Diameter (inches)		Free Air Displacement* cu. ft. per hour		Overall Height (inches)	
Type "A"	Type "C"	4 mph Wind	8 mph Wind	Type "A"	Type "C"
6	6	5740	6920	16	21
8	8	9780	12210	16	22½
10	10	15010	18350	18½	23½
12	12	21900	26200	20⅜	25½
14	..	26800	34100	25⅛	....
..	15	30600	39000	....	31½
16	..	35100	44700	27⅛	....
18	18	48400	57800	28	33½
20	20	59600	71000	31	35½
24	24	84500	104500	38	43½
30	30	127500	153500	44	50½
36	36	158800	188500	47½	53½
..	42	183500	234300	....	57½
..	48	202000	267800	....	61½

* Based on 10-ft. stack height and 20° F. temperature differential.

ALLEN TYPE "C" TURBINE VENTILATOR

The pioneer turbine type, originated by Allen. A unit which provides turbine ventilator advantages at the lowest cost consistent with quality material and construction.

Rotors are supported by 3 exterior arms (4 on larger sizes) of steel, jig assembled to insure perfect alignment. Rugged thrust bearing is hardened steel point riding in hardened steel concave seat, sensitive to slightest wind impulse. Constructed of prime zinc coated iron sheets spot welded for permanence.

All Allen Ventilators will be furnished on special order in copper or other metals in accordance with specifications.

Since turbine ventilators are dependent on wind for best performance, they should be installed clear of copings, parapets or other obstructions.

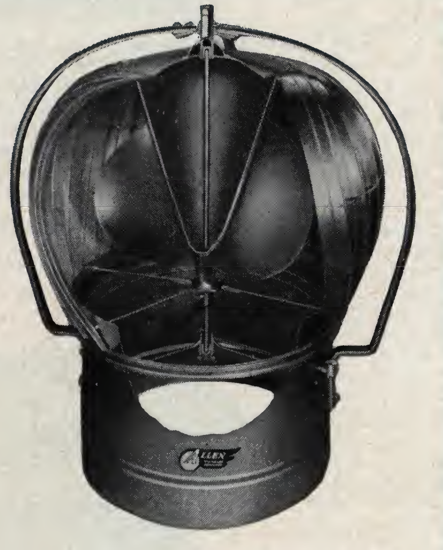
SPECIFICATIONS—Type "A" and Type "C"

All ventilators to be Turbine Type, constructed of............ (zinc coated iron, copper, etc.). All sheet metal parts to be spot welded where practical. Ventilators shall be painted inside and outside with exterior aluminum paint. Ventilators to be Allen Type "A" (or Allen Type "C") as manufactured by Allen Cooler & Ventilator, Inc., Rochester, Michigan.

to remove it as well as additional heat and replacement air. Allen is prepared to plan and furnish the "tailor made" equipment to assure a satisfactory job.

Fume Removal, although usually a local problem, requires careful study in the placing of hoods and enclosures and the utilization of mechanical equipment so that adjacent areas are properly protected without excessive use of power or waste of heat.

Dust Removal problems require analysis of the dust as to size, weight and mass of the particles and the calculation of the volume and velocity of air necessary to remove them. Allen engineers are equipped to make such analyses from actual dust counts and to recommend plant arrangement as well as the equipment required to remove the dust and to convey it to the atmosphere or to such suitable filters or collectors as may be provided.



ALLEN CONI-VANE TURBINE VENTILATOR

An amplification of the turbine principle. An interior displacement cone carries 3 scientifically designed vanes. Cone deflects air stream to blades and propeller action of vanes draws air up through stack increasing the overall efficiency.

Construction and materials similar to Type "C". Special heat treated alloy steel bearings have accessible sealed lubricant chambers.

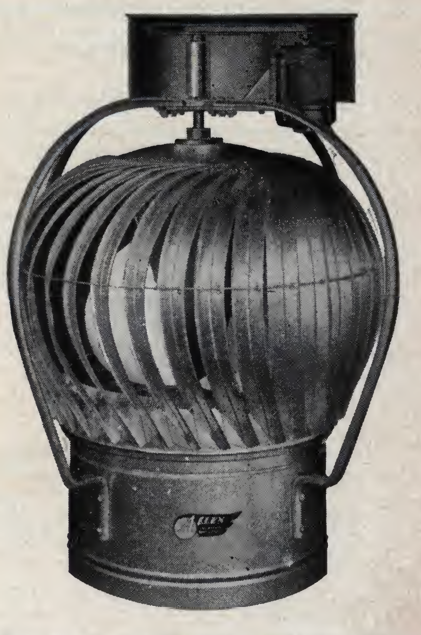
SPECIFICATIONS

All ventilators to be Turbine Type, constructed of............ (zinc coated iron, copper, etc.). Ventilators shall be equipped with interior displacement cones to which shall be attached a minimum of 3 compound curve CONI-VANES. All sheet metal parts to be spot welded where practical. Rotor shall be supported by no less than 3 exterior steel supporting arms. Ventilators shall be painted inside and outside with weathered aluminum paint. Ventilators to be Allen CONI-VANE as manufactured by Allen Cooler & Ventilator, Inc., Rochester, Michigan.

CAPACITIES

Throat Diameter (inches)	Free Air Displacement* cu. ft. per hour		Overall Height (inches)	Overall Width (inches)
	4 mph Wind	8 mph Wind		
10	17,700	21,600	23.5	18
12	25,800	30,800	25.5	20
15	36,000	46,000	31.5	24
18	57,000	68,000	33.5	28
20	70,100	83,500	35.5	31
24	99,400	123,000	43.5	37
30	150,000	181,000	50.5	46
36	187,000	222,000	53.5	48
42	216,000	276,000	57.5	58
48	240,000	315,000	61.5	66

* Based on 10-ft. stack height and 20° F. temperature differential.



ALLEN ELECTRO-WIND TURBINE VENTILATOR

For positive ventilation when wind is insufficient to rotate turbine, Electro-Wind is provided with electric drive. Electro-Wind is basically the same as Coni-Vane and is normally operated by wind. In calm conditions manual switch energizes electric drive to rotate head which draws air up the stack.

Construction similar to Coni-Vane. Drive is through cam and roller over-running clutch. Motor and drive located on top leaving throat unobstructed.

SPECIFICATIONS

Ventilators shall be turbine type, power driven with motor and driving mechanism mounted on top of the unit. Motor shall drive the turbine rotor by means of an over-running clutch which shall permit the turbine rotor to revolve freely by wind action when the power is disconnected. Ventilation shall be Allen ELECTRO-WIND as manufactured by Allen Cooler & Ventilator, Inc., Rochester, Michigan.

CAPACITIES

Throat Diameter (inches)	Motor		Approx. Rotor Speed (rpm)	Free Air Displacement cu. ft. per hour		Overall Height (inches)
	rpm	hp		Wind* Driven 5 mph	Electrically Driven	
12	1725	⅙	500	25,800	90,000	31
15	1725	⅙	415	36,000	126,500	37
18	1725	¼	360	57,000	185,100	40
20	1725	¼	310	70,100	225,000	42
24	1140	¼	290	99,400	324,000	50
30	1140	⅓	210	150,000	487,500	57
36	1140	⅓	180	187,000	612,000	61
42	1140	½	145	216,000	702,000	65
48	1140	½	145	240,000	780,000	69

* Based on 10-ft. stack height and 20° F. temperature differential.

I-LINE POWER FAN

The "I-Line" Series Roof Fans are designed to meet today's Architectural demand for a low silhouette without sacrificing capacity or efficiency. This is accomplished by use of a circular spun steel hood, and venturi, and baffle so arranged in relationship to the propeller to provide maximum efficiency with minimum over-all height. The above features result in the Allen "I-Line" Series Roof Fans with "EYE-APPEAL" for today's architects and "HIGH EFFICIENCY" for today's engineers.

CONSTRUCTION

The fan housing is a completely riveted and welded steel frame with flashings integral with the housing. Rigid support of fan, motor, and drive in the sturdy welded base eliminate vibration and insure long, trouble-free operation.

ALLEN "I-LINE" component units are:

Heavy gauge spun steel hood (14 ga. or heavier) directional baffle, welded housing of heavy sheet steel, ball bearing hub construction, ball bearing motors, and ¾" mesh bird screen.

All Allen "I-Line" series are available in zinc-coated steel or aluminum sheet with steel structural members.

The hood is fastened to the fan housing by four bolts. Removal of two of these bolts allows the hood to be hinged up and opened on the two remaining bolts, or if all four bolts are removed the hood can be lifted completely off.

This feature is especially desirable in locations where the handling of dust-laden air necessitates frequent cleaning of the ventilating equipment.

INSTALLATION

One of the most important advantages of the Allen "I-Line" Roof Fan, is its ease of installation. Two standard types of base construction are available at no extra cost. The standard curb construction enables the installer to merely secure the unit to a built-up level curb, or the flat flange readily fastens to a level deck with roofing "Mopped" over the flange for sealing.

FEATURES

- Low Silhouette
- Low Noise Level
- High Efficiency
- Low power consumption
- Easy to install (no extra base required)
- Easy accessibility for lubrication & inspection
- Low initial cost
- Versatility (supply or exhaust units)
- Wide capacity range (400 cfm to 35,000 cfm)
- Two types of standard base construction

BELT DRIVE

The I-Line Belt drive series are designed to operate against low static pressures in areas where noise level is a major factor. This is accomplished by use of a deep pitch steel fan blade, belt driven at low speeds with heavy duty belt drives and ball bearing motors. The fan assembly is mounted on a steel shaft which is supported on sealed ball bearings enclosed in a steel housing.

Automatic or motorized dampers may be mounted inside box. All units are provided with ¾ mesh bird screen in hood outlet.

DIRECT DRIVE

The I-Line direct drive series are designed to operate against static pressures and in building areas where noise level is of no consequence. Motors are totally enclosed, ball bearing type, explosion-proof or variable speed when specified, sturdy pressure type fan blades. Non-ferrous fans are provided with explosion-proof motors.

Automatic or motorized dampers may be mounted inside box. All units employ ¾ mesh bird screen in hood outlet.

VERTICAL DISCHARGE FAN

Fabricated of prime zinc coated steel, welded construction throughout. Automatic wing dampers open with air blast, close weather-tight when not operating. Motor fully enclosed, sealed bearings. Fan, high speed air foil design with tips running close to throat giving loading ring effect. Fan and motor, serviced through convenient access door, supported on sturdy welded steel frame.

DIRECT DRIVE VERTICAL DISCHARGE "VD"

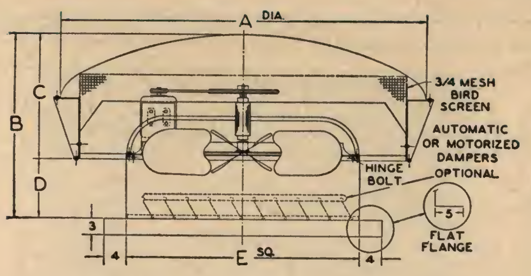
This is Allen's basic vertical discharge roof ventilator. High efficiency against static head at high velocity. Motor mounted in center of air stream with fan direct connected. Suitable for use in reasonably dry atmosphere in temperatures up to 120° F.

REMOTE DRIVE VERTICAL DISCHARGE "VDR"

Similar to Series "VD" except that motor is mounted in housing outside throat of ventilator. Drive is V-belt totally enclosed in housing. Fan runs on double row ball bearings lubricated and sealed. Suitable for use in corrosive and moisture laden atmospheres and in temperatures up to 175° F.

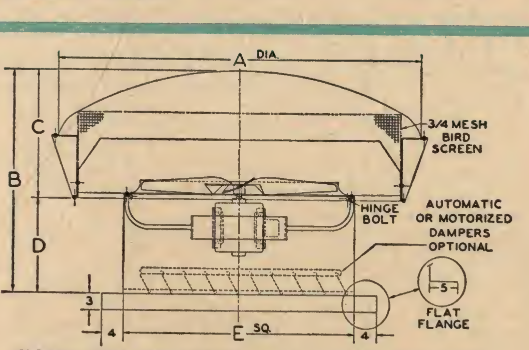
DIRECT, REMOTE DRIVE

Designed principally for industrial applications where extremely high discharge velocity prevents the tendency of fumes to short circuit back through building openings. This unit should be used where large volume and high velocity of air removal are primary to low noise level.



SPECIFICATIONS

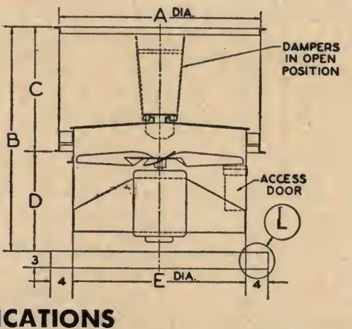
Furnish (and install as designated on plans) roof fan equipped with a removable spun hood (14 ga. minimum) and fan venturi, incorporating a directional baffle which shall deflect the air out of the hood outlet (360°). Fan shall be mounted on two rows of sealed ball bearings. Motor shall be ball bearing (insert current characteristics) with heavy duty V-Belt Drive arrangement. Fan shall be Allen Series "IB" I-Line Roof fan (model ....) with standard curb (or with 5" flat flange) Base construction as manufactured by ALLEN COOLER & VENTILATOR, INC., Rochester, Michigan.



NOTE: Curb dimensions on 12 and 18 inch units, 3¼" out, 2½" down.

SPECIFICATIONS

Furnish (and install as designated on plans) roof fan equipped with a removable spun hood (14 ga. minimum) and spun fan venturi, incorporating a directional baffle which shall deflect the air out the hood outlet (360°). Fan shall be mounted on industrial type, ball bearing, totally enclosed motor, supported by rigid frame attached to fan housing. (Current characteristics ....). Fan shall be ALLEN Series "ID" I-Line roof fan (Model ....) with standard curb (or with 5" flange) base construction as manufactured by ALLEN COOLER & VENTILATOR, INC., Rochester, Michigan.



SPECIFICATIONS

Furnish and install where indicated on plans, Allen Vertical Discharge roof fan(s) Series ("VD", "VDR") as manufactured by Allen Cooler & Ventilator, Inc., Rochester, Michigan. Fan shall be enclosed by cylindrical wind screen, angle ring reinforced for stiffness and attached to throat with steel angles. Wing dampers shall be provided—to be opened by air stream and closed by gravity when fan is not running. Dampers shall close weathertight and be arranged to drain outside of throat. Flashing shall be standard curb.

Motor shall be ball bearing (h.p.   r.p.m.).

(Pedestal furnished by customer except when ordered. Roof openings shown are recommended openings.)

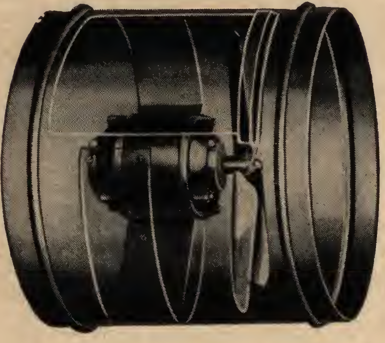
CAPACITIES AND DIMENSIONS

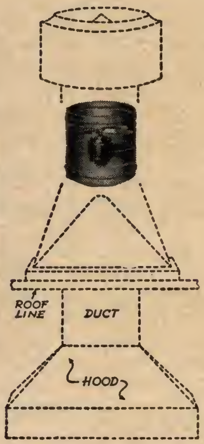
Catalog No.	Fan		Capacities and Motor Sizes						Dimensions					Approx. Weights	
			.000 S. P.		.125 S. P.		.250 S. P.								
	dia.	rpm	C.F.M.	hp	C.F.M.	hp	C.F.M.	hp	A	B	C	D	E	Net	Ship.
SERIES "IB"															
IB-24	24	580	4000	¼	2800	¼			44	24	14	10	28	175	295
IB-24A	24	670	4900	⅓	3800	⅓	2700	⅓	44	24	14	10	28	175	295
IB-24B	24	730	5500	½	4200	½	3100	½	44	24	14	10	28	185	305
IB-30	30	465	6000	⅓	4100	⅓			54	30	18	12	36	215	335
IB-30A	30	585	7500	½	6400	½	4100	½	54	30	18	12	36	230	350
IB-30B	30	650	8400	¾	7500	¾	5700	¾	54	30	18	12	36	240	360
IB-36	36	350	7720	⅓	5540	⅓			66	33	21	12	42	310	440
IB-36A	36	385	8500	½	6650	½	3500	½	66	33	21	12	42	325	455
IB-36B	36	450	9930	¾	8380	¾	6480	¾	66	33	21	12	42	330	460
IB-42	42	260	9110	⅓	5460	⅓			77	39	25	14	48	385	555
IB-42A	42	330	11570	¾	9050	¾	4760	¾	77	39	25	14	48	400	570
IB-42B	42	385	13500	1	11390	1	8730	1	77	39	25	14	48	420	590
IB-42C	42	430	15070	1½	13250	1½	11080	1½	77	39	25	14	48	430	600
IB-48	48	260	13600	½	9800	½			88	44	28	16	54	525	825
IB-48A	48	300	15700	1	11080	1	7660	1	88	44	28	16	54	535	835
IB-48B	48	340	17790	1½	15120	1½	11720	1½	88	44	28	16	54	555	855
IB-48C	48	385	20150	2	17770	2	15050	2	88	44	28	16	54	555	855
SERIES "ID"															
ID-12	10	1140	450	1/20	250	1/20	150	1/20	22	17	7	10	12½	90	170
ID-12A	10	1725	700	1/20	600	1/20	420	1/20	22	17	7	10	12½	90	170
ID-12B	12	1140	900	1/20	725	1/20	350	1/20	22	17	7	10	12½	90	170
ID-12C	12	1725	1400	⅙	1275	⅙	1150	⅙	22	17	7	10	12½	90	170
ID-18	18	850	1800	⅛	1500	⅛	900	⅛	33	23	10	13	18½	130	230
ID-18A	18	1140	2500	⅙	2250	⅙	1950	⅙	33	23	10	13	18½	130	230
ID-18B	18	1725	4000	½	3850	½	3700	½	33	23	10	13	18½	130	230
ID-24	24	860	4000	¼	3400	¼	2400	¼	44	31	14	17	28	215	345
ID-24A	24	1140	5100	½	4500	½	3500	½	44	31	14	17	28	200	330
ID-24B	24	1725	6100	¾	5500	¾	4900	¾	44	31	14	17	28	200	330
ID-30	30	860	5600	¼	4700	¼	3500	¼	54	35	18	17	36	265	395
ID-30A	30	1140	7300	½	6500	½	5400	½	54	35	18	17	36	255	385
ID-30B	30	1140	8200	¾	7200	¾	5800	¾	54	35	18	17	36	280	410
ID-36	36	860	9200	½	7800	½	6200	½	66	38	21	17	42	400	550
ID-36A	36	1140	10500	¾	9600	¾	8500	¾	66	38	21	17	42	380	530
ID-36B	36	1140	12000	1	10800	1	9600	1	66	38	21	17	42	380	530
ID-42	42	860	14300	1	13000	1	11500	1	77	52	25	27	48	520	790
ID-42A	42	860	18500	2	16900	2	14700	2	77	52	25	27	48	535	805
ID-42B	42	1140	21000	3	20000	3	17800	3	77	52	25	27	48	535	805
ID-42C	42	1140	25000	5	23500	5	21000	5	77	52	25	27	48	585	855
ID-48	48	860	19500	1½	18200	1½	16100	1½	88	59	28	31	54	640	940
ID-48A	48	860	24500	3	23000	3	20500	3	88	59	28	31	54	705	1005
ID-48B	48	1140	30000	5	28000	5	26000	5	88	59	28	31	54	705	1005
ID-48C	48	1140	34000	7½	32500	7½	30000	7½	88	59	28	31	54	745	1045
SERIES "VD"															
VD-24	24	860	4500	¼	3900	¼	2900	¼	30	35	18	17	25	245	375
VD-24A	24	1140	5600	½	5000	½	4050	½	30	35	18	17	25	230	360
VD-24B	24	1725	6500	¾	5900	¾	5400	¾	30	35	18	17	25	230	360
VD-30	30	860	7500	½	6400	½	4900	½	36	39	22	17	31	330	465
VD-30A	30	1140	8600	¾	7600	¾	6300	¾	36	39	22	17	31	330	465
VD-30B	30	1725	9800	1	9100	1	8200	1	36	39	22	17	31	330	465
VD-36	36	860	10100	½	8300	½	6450	¾	42	48	27	21	37	340	490
VD-36A	36	1140	13450	1½	12300	1½	10700	1½	42	48	27	21	37	340	490
VD-36B	36	1725	18000	3	17000	3	15000	3	42	48	27	21	37	380	530
VD-42	42	860	16100	1½	14000	1½	11850	1½	48	51	29	22	43	470	740
VD-42A	42	1140	21350	3	19800	3	18100	3	48	51	29	22	43	485	755
VD-42B	42	1140	25500	5	24000	5	21500	5	48	51	29	22	43	535	805
VD-48A	48	1140	31850	5	30100	5	28200	5	54	57	33	24	49	740	1050
VD-48B	48	1140	35000	7½	33500	7½	31000	7½	54	57	33	24	49	780	1090
VD-54	54	860	34250	5	31550	5	28750	5	60	61	35	26	55	940	1290
VD-54A	54	1140	45350	10	43500	10	41400	10	60	61	35	26	55	1030	1380
VD-60	60	860	46900	7½	44050	7½	40800	7½	66	70	40	30	61	1330	1750
VD-60A	60	1140	62200	15	60100	15	57800	15	66	70	40	30	61	1330	1750

NOTE: For data on capacities and horsepower requirements of Allen Roof Fans operating at static pressure greater than shown on table, contact Allen representative listed on page 8 or write direct to factory.

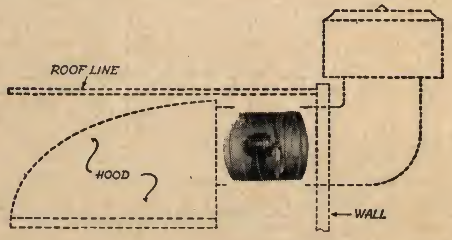
ALLEN STAXAUSTER

For conversion of all types of roof ventilators into powerful exhaust or air supply units





Diagrams of typical applications of Allen Staxauster.



The Allen Staxauster is a simple, compact, sturdy unit constructed of heavy-gauge materials. The centered fan and motor assembly are staunchly supported by an inner steel band which also serves as a reinforcement for the section. Motors are totally enclosed, ball bearing fan duty type directly connected to propellers. Inspection door of ample size permits easy access for inspection, lubrication, and cleaning. The enclosing shell is painted inside and out with weathered aluminum paint.

In new construction or in motorizing existing ventilators the Allen Staxauster has proved itself efficient, easy to install and economical in operation. This Staxauster can be combined readily with various stack heads to meet a wide range of needs.

REMOTE DRIVE ALLEN STAXAUSTER

Specially designed for applications handling corrosive fumes, and/or high temperature air, these Allen units have the motor and belt drive completely isolated from the air stream.

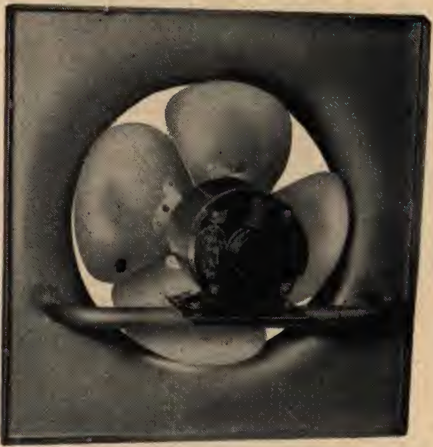
Catalog Number	rpm	Capacities (C.F.M.) & Motor HP Required at Static Pressures									
		.000"		.125"		.250"		.375"		.500"	
		C.F.M.	hp	C.F.M.	hp	C.F.M.	hp	C.F.M.	hp	C.F.M.	hp
Allen "STAXAUSTER"											
12100	1725	855	1/20	745	1/20	—	—	—	—	—	—
12101	1140	590	1/20	365	1/20	225	1/20	—	—	—	—
15120	1725	1010	1/20	940	1/20	800	1/12	—	—	—	—
15121	1140	670	1/20	500	1/20	—	—	—	—	—	—
15140	1725	1235	1/12	1150	1/12	1010	1/6	820	1/6	—	—
15141	1140	815	1/20	640	1/20	—	—	—	—	—	—
15142	1725	1580	1/6	1490	1/6	1355	1/6	1165	1/6	—	—
15143	1140	1050	1/20	885	1/20	650	1/8	260	1/8	—	—
18160	1725	2450	1/6	2320	1/6	2215	1/4	2080	1/4	—	—
18161	1140	1615	1/8	1295	1/8	—	—	—	—	—	—
20180	1725	3460	1/3	3360	1/3	3240	1/2	3120	1/2	—	—
20181	1140	2285	1/8	2125	1/8	1865	1/6	—	—	—	—
20191	860	1720	1/8	1430	1/8	—	—	—	—	—	—
24200	1140	3060	1/6	2835	1/6	2535	1/4	—	—	—	—
24201	860	2280	1/8	1945	1/8	—	—	—	—	—	—
30240	1140	5800	1/2	5500	1/2	5160	1/2	4680	3/4	—	—
30241	860	4320	1/4	3900	1/4	3170	1/4	—	—	—	—
30280	1140	6650	3/4	6260	3/4	5800	3/4	5140	3/4	—	—
30281	860	4960	1/3	4420	1/3	3520	1/3	—	—	—	—
36300	1140	10000	1-1/2	9610	1-1/2	9050	1-1/2	8330	1-1/2	—	—
36301	860	7480	1/2	6710	1/2	5910	1/2	4550	3/4	—	—
42360	1140	17100	1	14900	1	12100	1-1/2	9600	1-1/2	7200	1-1/2
42361	860	12700	1/2	11000	1/2	8500	1/2	4800	1/2	—	—
42363	1140	19400	2	18000	2	16200	2	14200	2	11650	2
42364	860	14500	1	12700	1	10800	1	7475	1	—	—
42365	1140	21000	3	19600	3	18200	3	16100	3	14500	3
Allen Remote Drive "STAXAUSTER"											
R-15140	1725	1235	1/6	1155	1/6	1010	1/6	820	1/6	—	—
R-15144	1725	1690	1/6	1500	1/6	1355	1/6	1165	1/6	—	—
R-15145	1725	2200	1/4	2090	1/4	1900	1/4	1800	1/3	1700	1/3
R-18163	1500	2150	1/6	2010	1/6	1850	1/4	1665	1/4	—	—
R-18166	1725	2400	1/4	2300	1/4	2200	1/4	2080	1/4	1900	1/4
R-20180	1140	2710	1/6	2500	1/6	2170	1/4	—	—	—	—
R-20184	1725	3500	1/4	3400	1/3	3250	1/3	3000	1/2	2900	1/2
R-24200	1150	3060	1/6	2835	1/6	2535	1/4	—	—	—	—
R-24203	1500	4260	1/2	4000	1/2	3760	3/4	3390	3/4	3060	3/4
R-24224	1140	4290	1/4	4010	1/3	3680	1/3	3100	1/3	—	—
R-24205	1725	4600	1/2	4490	1/2	4340	1/2	4170	3/4	—	—
R-30242	1140	5800	1/3	5500	1/2	5150	1/2	4700	3/4	—	—
R-30260	880	6500	1/2	5900	3/4	5240	3/4	4200	3/4	—	—
R-30283	1140	6650	3/4	6250	3/4	5800	3/4	5150	3/4	—	—
R-30284	1140	8300	1	7900	1	7400	1	6800	1	—	—
R-36303	1150	7050	1/2	6140	1/2	4500	1/2	3100	1/2	2000	1/2
R-36304	1725	10200	1	9750	1	8660	1	7300	1-1/2	5200	1-1/2
R-36307	1140	10700	1-1/2	10440	1-1/2	10000	1-1/2	9700	1-1/2	9300	1-1/2
R-42360	863	12400	1/2	10800	1/2	7910	1/2	4950	1/2	1350	1/2
R-42361	1150	15400	1	13500	1	11000	1-1/2	9100	1-1/2	6500	1-1/2
R-42363	1150	17500	2	16400	2	14800	3	13100	3	10500	3
R-42365	1150	20000	3	18800	3	17300	3	15700	5	13800	5

Notes: First two digits in catalog number indicate the diameter of the stack in inches.

Second two digits in catalog number indicate the diameter of the fan in inches.

For capacities against static pressures greater than those shown in tables, inquire of local representative or write direct to factory.

ALLEN EXHAUST FAN

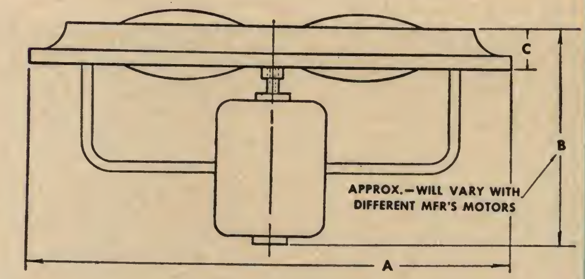


These fans embody proven engineering design and high standards of workmanship and material. Venturi orifice steel panels, with 1" right angle flange on four sides, ball bearing motors mounted on welded tube supports, with direct drive steel or aluminum blade fans.

CAPACITIES

Catalog No.	rpm	No. Blades	Capacities in C.F.M. Against Static Pressure					
				.0"	.125"	.250"	.375"	.500"
120	1725	4	C.F.M.	1010	940	800	......	......
			hp	1/20	1/20	1/20	......	......
121	1140	4	C.F.M.	670	500	......	......	......
			hp	1/20	1/20	......	......	......
160	1725	4	C.F.M.	2450	2320	2215	2080	1900
			hp	1/6	1/6	1/4	1/4	1/4
161	1140	4	C.F.M.	1630	1465	1150	905	710
			hp	1/20	1/12	1/12	1/8	1/8
200	1140	3	C.F.M.	3060	2835	2535	......	......
			hp	1/6	1/6	1/4	......	......
201	860	3	C.F.M.	2280	1945	......	......	......
			hp	1/8	1/8	......	......	......
240	1140	4	C.F.M.	5800	5500	5160	4680	......
			hp	1/2	1/2	1/2	1/2	......
241	860	4	C.F.M.	4320	3900	3170	......	......
			hp	1/4	1/4	1/4	......	......
300	1140	4	C.F.M.	10000	9600	9050	8330	......
			hp	1-1/2	1-1/2	1-1/2	1-1/2	......
301	860	4	C.F.M.	7480	6700	5900	4550	......
			hp	1/2	1/2	3/4	3/4	......

Note: First two figures in catalog number indicate diameter of fan.



DIMENSIONS

Catalog Number	A	B	C
120	18	12⅝	2½
121	18	12⅝	2½
160	22	16⅝	3
161	22	16⅝	3
200	26	20⅞	3
201	26	20⅞	3
240	30	25	3
241	30	25	3
300	36	31	3
301	36	31	3

LO-NOIZ-LEVEL Multiblade Fans

Precision Balanced Multiblade Units Designed For Especially Quiet Operation

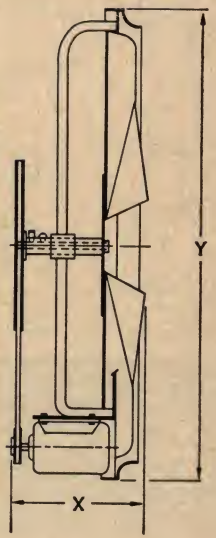
The Allen Lo-Noiz-Level Fan is an improved multiblade type operating at slow speeds. Unit pressures on the fan blades are low but close spacing prevents reentry of exhausted air. Frame is of heavy steel venturi const. Fan hub is mounted on a double row of dust-proof ball bearings. All fractional horsepower single phase motors are resiliently mounted and drive fan through oversize V-belt on grooved pulleys.

The Allen Lo-Noiz-Level fan is suitable for use in ventilating offices, apartments, homes, schools and other buildings where quietness of operation is essential. It is ideal for installation as an attic fan in a residence.

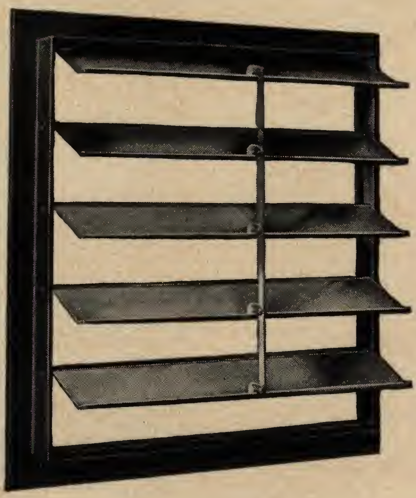
CAPACITIES AND DIMENSIONS

Catalog Number	No. Blades	rpm	C.F.M. F. D.	Motor hp	Dimensions	
					X	Y
30	12	410	5640	¼	14	34¼
30A	12	460	6400	⅓	14	34¼
36	12	330	7850	¼	14	40¼
36A	12	370	8550	⅓	14	40¼
42	12	300	8830	¼	14	46¼
42A	12	330	10900	⅓	14	46¼
42B	12	380	13500	½	14	46¼
48	14	240	12700	⅓	15	52¾
48A	14	280	15600	½	15	52¾
48B	14	335	17100	¾	15	52¾
54	16	205	18500	½	15	58¾
54A	16	250	20700	¾	15	58¾
54B	16	300	23400	1	19	58¾
60	18	180	22700	¾	15	65¼
60A	18	210	26200	1	19	65¼
60B	18	275	29300	1½	19	65¼
60C	18	300	33000	2	20	65¼
60D	18	340	37000	3	20	66½
60E	18	410	46500	5	24	66½

Note: First two figures in catalog number indicate diameter of fan.



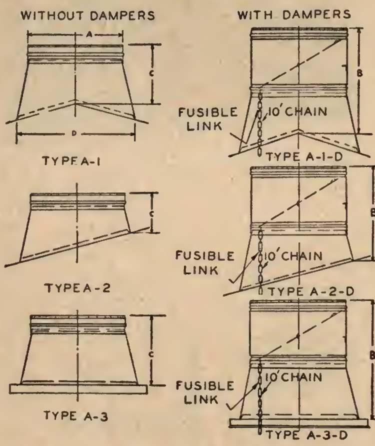
Automatic, Manual, Motor-operated and Stationary Shutters



Good practice indicates the protection of all exterior wall fan openings with automatic shutters. Allen offers the Elgo line of automatic shutters for this purpose. Constructed with hot-rolled steel angle frames and light gauge aluminum louvres equipped with felt silencers. Completely weather-stripped around inside edge of frame to insure tight closing and effective rain proofing. Louvres lie inside of frame, when closed, to prevent outside air currents from opening the louvres. Built to any size from 8" by 8" to 72" by 72". Rectangular and other shapes as well as special materials on special order.

VENTILATOR BASES

Allen bases are constructed of prime sheets of steel (or other metals as specified) and finished with weathered aluminum paint. All weather seams are spot welded or riveted, then solder is flowed into the joint to insure against leakage. All sizes have a condensation gutter around the perimeter which traps all condensate. Weep openings conduct any such condensate to the outside. When ordering No. 1 or 2 bases in either Type "A" or "A"-D specify slope of roof. Type "A"-3 or "A"-3-D bases are for concrete or wood curbs and have 4-in. horizontal and 3-in. vertical flange. Roof openings should correspond with "D" dimension as shown in table.



Allen Square to Round Bases

Dimensions in inches				Gauge Zinc Coated Steel	Weight Copper (ounces)
A	B	C	D		
6	13	10	10	24	16
8	14	10	12	24	16
10	16	12	14	24	16
12	18	12	16	24	16
14	20	12	18	22	16
15	20	12	20	22	16
16	22	12	22	22	16
18	22	12	24	22	16
20	26	16	26	22	16
24	30	16	30	20	24
30	36	16	36	20	24
36	42	20	44	18	24
42	48	20	52	18	24
48	52	20	60	18	24

ALLEN STANDARD STATIONARY VENTILATOR

This compact unit has been designed by Allen solely to operate as a weatherproof cap over a fan section in a round stack.

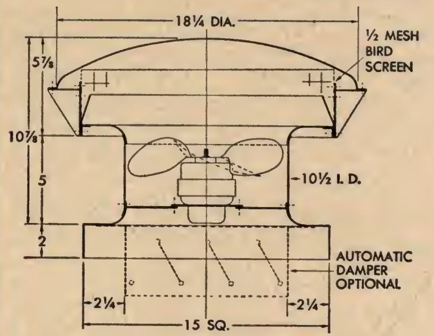
It is sturdy construction, small in bulk, low in cost. Employed with a fan in the stack, this unit shows a pressure drop of less than 1/16" water pressure.

With either direct or remote drive Allen Staxauster this unit will satisfactorily perform its simple function of excluding weather.

ALLEN TYPE "T" ROOF VENTILATOR

Designed for low modern buildings where low velocity ventilation is required. Available in prime zinc coated sheet or aluminum construction.

Cat. No.	Fan Dia.	Motor Data		Capacities			
		HP	RPM	.000 SP	.100 SP	.125 SP	.250 SP
T-9	10"	9 W	1550	420	255	230	110
T-16	10"	16 W	1550	600	450	380	260



SPECIAL PROTECTIVE COATINGS AVAILABLE

Where corrosive conditions such as acid or caustic fumes, extreme humidity or salt air, are so severe that metals require extra protection, Allen can coat the product with suitable material, at a slight extra cost.

ALABAMA
Birmingham 3 • Associated Engrs.
3716—3rd Ave., So.
Phone: Lyric 2-8116
Mobile 3 • Shearer & Rayford
2504 Old Shell Rd.
Phone: Greenwood 9-4581
Montgomery 2 • Morton Sales Co.
782 S. Hull St. Box 814
Phone: Amherst 2-4877
ARKANSAS
Little Rock • Richard S. Vinsant
P.O. Box 2536
Phone: Mohawk 6-2338
CALIFORNIA
Los Angeles 39 • Air Equip. Sales
3020 Glendale Blvd.
Phone: NOrmandy 5-5827
Oakland 7 • Oliphant Comm'l Corp.
610 Oak St.
Phone: TEmplebar 6-0868
COLORADO
Denver 10 • Frantz Service Co.
2090 S. Columbine St.
Phone: Spruce 7-2245
CONNECTICUT
Westport • W. E. Mack
Greens Farms Road
Phone: Clearwater 9-5704
DISTRICT OF COLUMBIA
Washington 5 • Grigsby Co.
1204 "K" St. N.W.
Phone: National 8-4259
FLORIDA
Jacksonville • Robert C. Brock
8049 Reid Ave.

FLORIDA—Continued
Miami 35 • Kelley Associates, Inc.
1521 S. W. 11th Terrace
Phone: 4-4273
Tampa 11 • Henry G. Graham
P.O. 13246
Phone: 66-3251
GEORGIA
Atlanta 3 • Felix J. Commagere
157 Simpson St. N. W.
Phone: JAckson 52761
IDAHO
Boise • Idaho Industrial Supply Co.
114 S. 23rd St.
Phone: 8199-W
ILLINOIS
Chicago 11 • Metal Parts & Equip't Co.
620 N. Michigan Ave.
Phone: SUperior 7-9821
INDIANA
Indianapolis 4 • S.E. Fenstermaker & Co.
937 Architects & Builders Bldg.
Phone: MElrose 5-1552
IOWA
Des Moines 9 • Deco Engineering Prods.
1112 Locust St.
Phone: Atlantic 8-5721
KENTUCKY
Lexington • Wides Material Co.
700-708 East Seventh St.
Phone: Dial 4-3022
Louisville 2 • Equipment & Specialties Co.
627 S. Jackson St.
Phone: JUniper 4-7114

LOUISIANA
Shreveport • Richard L. Johnson Jr.
P.O. Box 304
MICHIGAN
Detroit 5 • Harvey W. Reid Co.
11803 Gratiot
Phone: LAkeview 7-1994
Lansing 10 • Karl B. Hart
1213 Gordon St.
Phone: Ivanhoe 2-3377
MINNESOTA
St. Paul 14 • Hultgren & Strutzel Co.
301 Security Bldg. 2395 University
Phone: MIdway 4-6704
MISSOURI
Kansas City 6 • General Htg. Spec. Co.
222 Reliance Bldg.
Phone: VIctor 2-7488
St. Louis 1 • Lane Machinery Co.
419 Buder Bldg.
Phone: CEntral 1-0011-2-3
MONTANA
Helena • Builders Supply Co., Box 176
NEBRASKA
Omaha 2 • Prawl Engineering Co.
5328 Center St.
Phone: WEbster 1221
NEW MEXICO
Albuquerque • George Phillips
413 Slate Ave., N.W.
Phone: 6-4558
NEW YORK
Floral Park • Air Champions, Inc.
205 Jericho Turnpike
Phone: Fl. Park 2-1286

NORTH CAROLINA
Charlotte • W. Fred Casey & Co.
510 W. 4th St., Box 904
Phone: Edison 4-0732

NORTH DAKOTA
Fargo • Midwest Engineering Co.
1335 Fifth Ave. No.
Phone: 2-4401

OHIO
Akron 13 • W. W. Evans
Box 5153
Phone: Mohawk 6-8262
Cincinnati 2 • Calvin C. Huenefeld
626 Broadway
Phone: GArfield 1-2375
Cleveland 15 • C. E. Noel & Assoc.
20800 Center Ridge Road
Phone: Edison 3-0122
Columbus 15 • Condit Construction Prods. Co.
1026 Goodale Blvd.
Phone: AXminster 4-3791
Dayton 3 • Condit Construction Products
2800 E. Third St.
Phone: KEnmore 1178
Toledo 12 • A. R. Close
4337 Overland Pkwy.
Phone: Greenwood 4-9909

OKLAHOMA
Oklahoma City • George Wilson
1217-19 W. Reno St.
Phone: FOrest 5-8151

OREGON
Portland 6 • Harris Supply Co.
524 N. W. 114th St.
Phone: AT. 4119
PENNSYLVANIA
Philadelphia 30 • Champion Sales Co.
1817 Callowhill St.
Phone: LOcust 7-1188
TENNESSEE
Chattanooga 4 • Hale & Wallace, Inc.
1077 Duncan Ave., P. O. Box 426
Phone: Madison 4-3391
Memphis 3 • Hurston-Conaway, Inc.
2470 Poplar Ave.
Phone: Glendale 8-4461
TEXAS
Corpus Christi • L. S. Pawkett & Co.
Rm. 412, Smith Prof. Bldg.
Phone: Tulip 4-3166
Dallas 2 • Metal Products Co.
2326 Topeka St.
Phone: Riverside 2-2031
Prospect 2669
Houston 2 • H. L. Thompson Co.
1002 Esperson Bldg.
Phone: CApital 7-1440
CApital 7-7679
San Antonio 12 • L. S. Pawkett & Co.
733 E. Evergreen Ct., Box 8057
Phone: CApitol 6-1291
VIRGINIA
Richmond 1 • Power Equipment Co.
1309 W. Main St., P.O. Box 1G
Phone: Elgin 5-2888
WASHINGTON
Spokane 24 • J. C. Kelly Co.
East 3008 Trent Ave., Box 2208

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